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49. (Amended) A universal power system utilizing a power controller capable of inputting multiple power sources, including at least one primary source of AC or DC electrical power of singular or variable voltage and at least one secondary power connection for processing external DC electrical power in service to at least one DC compatible load at its output, such as a lighting fixture requiring DC electrical power, said system comprising:

201

said power controller including a converter converting said primary [AC or DC] electrical power into a defined DC-regulated voltage used to provide and manage end-use service power;

said power controller having said at least one secondary power connection for processing at least one external alternative DC power source in readiness for service to said at least one DC compatible load; and,

said power controller having circuitry at said secondary power connection for combining said alternative DC power source with said voltage regulated DC voltage [converted from said primary power source] in service to said at least one DC compatible load.

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~~50. (Amended) The universal power system of Claim 49 wherein said at least one secondary power connection comprises at least two secondary power connections including one first secondary power connection and at least one second secondary power connection.~~

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~~51. (Amended) The universal power system of Claim 49 wherein said alternative DC power source is at least one external electrical storage medium [such as a rechargeable storage battery], said at least one secondary connection for said electrical storage medium having circuitry for managing the state of charge for said electrical storage medium.~~

52. (Unchanged) The universal power system of Claim 49 wherein said alternative DC power source is at least one supplemental source of power capable of providing DC electricity.

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292

~~53. (Amended) The universal power system of Claim 50 wherein said at least one alternative DC power source is an external electrical storage medium, [such as a rechargeable storage battery], said at least one secondary connection for said electrical storage medium having circuitry for managing the state of charge for said electrical storage medium.~~

54. (Unchanged) The universal power system of Claim 50 wherein said second secondary alternative DC power source is at least one supplemental source of power capable of providing DC electricity.

55. (Amended) The universal power system of Claim 50 wherein said ~~first secondary alternative DC power source is at least one external electrical storage medium [such as a rechargeable storage battery] and said second secondary alternative DC power source is at least one supplemental source capable of providing DC electricity.~~

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f2 56. (Amended) The universal power system as in Claim 50 further comprising said power controller having, [in the absence of said primary AC or DC electrical power source], circuitry for combining power from said at least one first secondary power connection and said at least one second secondary power connection in service to said at least one DC compatible load , in the absence of said primary electrical power source.

57. (Unchanged) The universal power system as in Claim 56 wherein said power system is a stand-alone power system capable of supporting end-use electrical loads in the absence of a central AC grid power source or any source at its primary input.

58. (Unchanged) The universal power system as in Claim 56 wherein said power system is a stand-alone power system capable of supporting end-use electrical loads in the absence of a central AC grid power source at its primary input but with a local source of AC or DC power at its

primary input.

D4 59. (Amended) The universal power system as in Claim 50 wherein said power system is a solar-assisted power system [wherein] further comprising a source of AC or DC power [is] connected to said primary input and a external photovoltaic source of DC electrical power [is] connected to said second secondary input of said power controller in service to at least one DC load.

60. (Amended) The universal power system of Claim 49 wherein said universal power system is an un-interruptible power system, [wherein] constructed so that if the primary source of AC or DC power connected to said primary input [should fail], fails [then] at least one DC source of rechargeable electric storage is available and connected to said at least one secondary connection of said power controller in service to said DC load.

61. (Amended) The universal power system of Claim 50 wherein said universal power system is an un-interruptible power system, [wherein] constructed so that if the primary source of AC or DC power connected to said primary input [should fail], fails then at least one DC source of rechargeable electric storage is available and connected to said [first] second secondary connection of said power controller in service to said DC load.

62. (Amended) The universal power system of Claim 50 wherein said power system is a solar electric power system of a first type, [wherein further] at least one rechargeable source of DC power [is] being connected to said first secondary connection and a photovoltaic source of nominal DC voltage [is] being connected to said second secondary connection of said power controller in service to said at least one DC load.

63. (Amended) The universal power system of Claim 50 wherein said power system is a solar electric power system of a second type, [wherein further] a photovoltaic source of variable DC voltage [is] being connected to said primary input of said power controller [with] and at least one supplemental source of rechargeable DC power being connected to said first secondary connection with optional use of said second secondary connection.

64. (Amended) The universal power system of Claim 50 wherein said power system is a solar electric power system of a third type, [wherein further] a least one rechargeable source of DC power [is] being connected to said first secondary connection and a photovoltaic source of nominal DC voltage [is] being connected to said second secondary connection of said power controller in service to a DC-to-AC

104 line compatible inverter in order to support at least one conventional AC load.

65. (Unchanged) The power system of Claim 64 wherein said power controller supports at its output a DC-to-AC line compatible inverter and at least one other DC load.

66. (Amended) The universal power system of Claim 50 wherein said power system is a solar electric power system of a fourth type, [wherein further] a photovoltaic source of variable DC voltage [is] being connected to said primary input of said power controller [with] and at least one source of rechargeable DC power being connected to said first secondary connection, with optional use of said second secondary connection in service to a DC-to-AC line compatible inverter in order to support at least one conventional AC load.

67. (Unchanged) The power system of claim 66 wherein said power controller supports at its output a DC-to-AC line compatible inverter and at least one other DC load.

68. (Unchanged) The universal power system as in Claim 50 wherein said power system includes a source of AC or DC power at said primary input and a fuel cell source of DC electrical power is connected to said second secondary connection.

69. (Amended) The universal power system of Claim 50 wherein said power system is a fuel cell power system of a first type, [wherein further] at least one rechargeable source of DC power [is] being connected to said first secondary connection and a fuel cell source of nominal DC voltage [is] being connected to said second secondary connection of said power controller in service to said at least one DC load.

70. (Amended) The universal power system of Claim 50 wherein said power system is a fuel cell power system of a second type, [wherein further] a fuel cell source of variable DC voltage [is] being connected to said primary input of said power controller [with] and at least one supplemental source of rechargeable DC power being connected to said first secondary connection with optional use of said second secondary connection.

71. (Amended) The universal power system of Claim 50 wherein said power system is a fuel cell power system of a third type, [wherein further] a least one rechargeable source of DC power [is] being connected to said first secondary connection and a fuel cell source of nominal DC voltage [is] being connected to said second secondary connection of said power controller in service to a DC-to-AC line compatible inverter in order to support at least one

66 conventional AC load.

72. (Unchanged) The power system of claim 71 wherein said power controller supports at its output a DC-to-AC line compatible inverter and at least one other DC load.

67 73. (Amended) The universal power system of Claim 50 wherein said power system is a fuel cell power system of a fourth type, [wherein further] a fuel cell source of variable DC voltage [is] being connected to said primary input of said power controller [with] and at least one source of rechargeable DC power being connected to said first secondary connection with optional use of said second secondary connection in service to a DC-to-AC line compatible inverter in order to support at least one conventional AC load.

74. (Unchanged) The power system of claim 73 wherein said power controller supports at its output a DC-to-AC line compatible inverter and at least one other DC load.

75. (Unchanged) The universal power system as in Claim 50 wherein alternative power source is a cogenerator connected to said second secondary input of said power controller in service to said at least one DC load.

68 76. (Amended) The universal power system of Claim 50

wherein said power system is a cogenerator power system of a first type, [wherein further] at least one rechargeable source of DC power [is] being connected to said first secondary connection and a cogenerator source of nominal DC voltage [is] being connected to said second secondary connection of said power controller in service to said at least one DC load.

77. (Amended) The universal power system of Claim 50 wherein said power system is a cogenerator power system of a second type, [wherein further] a cogenerator source of variable DC voltage [is] being connected to said primary input of said power controller [with] and at least one supplemental source of rechargeable DC power being connected to said first secondary connection with optional use of said second secondary connection.

78. (Amended) The universal power system of Claim 50 wherein said power system is a cogenerator power system of a third type, [wherein further] a least one rechargeable source of DC power [is] being connected to said first secondary connection and a cogenerator source of nominal DC voltage [is] being connected to said second secondary connection of said power controller in service to a DC-to-AC line compatible inverter in order to support at least one conventional AC load.

79. (Unchanged) The power system of claim 75 wherein said power controller supports at its output a DC-to-AC line compatible inverter and at least one other DC load.

80. (new) The universal power system of Claim 50 wherein said power system is a cogenerator power system of a fourth type, [wherein further] a cogenerator source of variable DC voltage [is] being connected to said primary input of said power controller [with] and at least one source of rechargeable DC power being connected to said first secondary connection with optional use of said second secondary connection in service to a DC-to-AC line compatible inverter in order to support at least one conventional AC load.

81. (Unchanged) The power system of claim 80 wherein said power controller supports at its output a DC-to-AC line compatible inverter and at least one other DC load.

82. (Unchanged) The universal power system as in Claim 50 wherein alternative power source is an alternative DC power producing source device connected to said second secondary input of said power controller in service to said at least one DC load.

83. (Amended) The universal power system of Claim 50 wherein said power system is an alternative DC power producing source [device] of a first type, [wherein further] at least one rechargeable source of DC power [is] being connected to said first secondary connection and an alternative DC power producing source device of nominal DC voltage [is] being connected to said second secondary connection of said power controller in service to said at least one DC load.

84. (Amended) The universal power system of Claim 50 wherein said power system is an alternative DC power producing source device of a second type, [wherein further] an alternative DC power producing source device of variable DC voltage [is] being connected to said primary input of said power controller, [with] at least one supplemental source of rechargeable DC power being connected to said first secondary connection with optional use of said second secondary connection.

85. (Amended) The universal power system of Claim 50 wherein said power system is an alternative DC power producing source [device] of a third type, [wherein further] a least one rechargeable source of DC power [is] being connected to said first secondary connection and an alternative DC power producing source device of nominal DC voltage [is] being connected to said second secondary

D10 connection of said power controller in service to a DC-to-AC line compatible inverter in order to support at least one conventional AC load.

86. (Unchanged) The power system of claim 75 wherein said power controller supports at its output a DC-to-AC line compatible inverter and at least one other DC load.

D11 87. (Amended) The universal power system of Claim 50 wherein said power system is a cogenerator power system of a fourth type, [wherein further] a cogenerator source of variable DC voltage [is] being connected to said primary input of said power controller [with] and at least one source of rechargeable DC power being connected to said first secondary connection with optional use of said second secondary connection in service to a DC-to-AC line compatible inverter in order to support at least one conventional AC load.

88. (Unchanged) The power system of claim 80 wherein said power controller supports at its output a DC-to-AC line compatible inverter and at least one other DC load.

D12 ~~89. (Amended) The universal power system of Claim 49 wherein said power system is a voltage regulated power system of higher quality, [wherein further] said primary source of power [is] being any naturally occurring variable~~

voltage AC or DC source of power with optional use of at least one supplemental source of secondary power.

90. (Amended) The universal power system of Claim 50 wherein said power system is a voltage regulated power system of higher quality, [wherein further] said primary source of power [is] being any naturally occurring variable voltage AC or DC source of power with optional use of at least one supplemental source of secondary power.

91. (Amended) The universal power system of Claim 90 wherein said power system is a brown-out and over-voltage mitigating power system in service to end-use loads at its output, [wherein further] said system [maintains] maintaining a nominally constant voltage at its output with varying voltage at its primary input to compensate for electrical conditions where there is a precipitous drop in line or source voltage, known as a [brown-outs], brown-out [and/or] and an unstable upper and lower excursion of line voltage or source power at the primary input.

92. (Amended) The universal power system of Claim 49 wherein said primary source of power is [an AC generator] a source of AC with optional use of at least one of said [first and/or second] secondary DC connection [source] sources of DC power.

93. (Unchanged) The universal power system of Claim 92 wherein said AC generator is a gas-fueled generator.

94. (Unchanged) The universal power system of Claim 93 wherein said AC generator is a cogenerator.

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95. (Amended) The universal power system of Claim 49 wherein said primary source of power is one of an AC gas-fueled generator [or] and a AC cogenerator [or other conceivable source of AC] with optional use of at least one of said [first and/or second] secondary DC [input] connection [source] sources of DC power.

96. (Amended) The universal power system of Claim 50 wherein said primary source of power is one of an AC gas-fueled generator [or] and a AC cogenerator [or other conceivable source of AC] with optional use of at least one of said [first and/or second] secondary DC [input] connection [source] sources of DC power.

97. (Amended) The universal power system of Claim 49 wherein said at least one DC load is [any DC compatible load or loads such as] one of lighting, office equipment, electronic devices, motor drive apparatus, DC-to-AC line inverter [or] and [any] an end-use device capable operating at the DC output voltage of said power controller.

98. (Amended) The universal power system of Claim 50 wherein said at least one DC load is [any DC compatible load or loads such as] one of lighting, office equipment, electronic devices, motor drive apparatus, DC-to-AC line inverter [or] and [any] an end-use device capable operating at the DC output voltage of said power controller.

99. (Amended) The universal power system of Claim 49 wherein said at least one DC load is a DC to AC [60hz] 60Hz inverter, [wherein] said power system [is] being acceptable to devices that operate on standard AC line voltages at the output of said inverter.

100. (Amended) The universal power system of Claim 50 wherein said at least one DC load is an [60hz] 60Hz inverter, [wherein] said power system [is] being acceptable to devices that operate on standard AC line voltages at the output of the inverter.

101. (Unchanged) The universal power system of Claim 49 wherein said power system is a unitary and modular package, said package forming a building block which may be installed in incremental units for greater service capacity.

102. (Unchanged) The universal power system of Claim 50, wherein said power system is a unitary and modular package, said package forming a building block which may be

installed in incremental units for greater service capacity.

103. (Unchanged) The universal power system of Claim 101 wherein said power system is applied with outputs connected in series for greater voltage and power capacity.

104. (Unchanged) The universal power system of Claim 102 wherein said power system is applied with outputs connected in parallel for greater current capacity and power capacity thus for flexible building blocks.

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105. (Amended) The universal power system of Claim 101, wherein said unitary and modular package is connected in close physical proximity with individual output circuit legs to said loads, [such as individual or grouped lighting fixtures], and remote from said primary [AC or DC] input power source connection, thus minimizing load-side voltage drops when said power controller's DC output voltage is [operating at relatively] a low output voltage; said at least one DC load leg comprising a plurality of DC load legs clustered around said modular universal power system.

106. (Amended) The universal power system of Claim 102, wherein said unitary and modular package is connected in close physical proximity with individual output circuit legs to said loads[,such as individual or grouped lighting fixtures], and remote from said primary [AC or DC] input

114
power source connection, thus minimizing load-side voltage drops when said power controller's DC output voltage is [operating at relatively] a low output voltage; said at least one DC load leg comprising a plurality of DC load legs clustered around said modular universal power system.

107. (Unchanged) The universal power system of Claim 49, wherein said power system is an emergency lighting system in service to a lighting load with a source of primary power connected at the input and with a storable power source at said at least one secondary connection with circuitry to insure operation from the storage during primary power interruptions at said primary input.

108. (Unchanged) The universal power system of Claim 50, wherein said power system is an emergency lighting system in service to a lighting load with a source of primary power connected at the input and with a storable power source at said first secondary connection with circuitry to insure operation from the storage during primary power interruptions at said primary input.

109. (Unchanged) The universal power system of Claim 101, wherein said power system is an emergency lighting system in service to a lighting load with a source of primary power connected at the input and with a storable power source at said at least one secondary connection with

circuitry to insure operation from the storage during primary power interruptions at said primary input.

110. (Unchanged) The universal power system of Claim 102, wherein said power system is an emergency lighting system in service to a lighting load with a source of primary power connected at the input and with a storable power source at said first secondary connection with circuitry to insure operation from the storage during primary power interruptions at said primary input.

111. (Amended) The universal power system of Claim 49 wherein said power system is an emergency power system in service to any electrical load at its output, [with or without an optional intermediate DC-to-AC 60 Hz line compatible inverter at said output, with] a source of primary power being connected at the input and [with] a storable power source provided at said at least one secondary connection to insure operation during primary power interruptions.

112. (Amended) The universal power system of Claim 50 wherein said power system is an emergency power system in service to any electrical load at its output, [with or without an optional intermediate DC-to-AC 60 Hz line compatible inverter at said output, with] a source of primary power being connected at the input and [with] a

storable power source being provided at said first secondary connection to insure operation during primary power interruptions.

113. (Amended) The universal power system of Claim 101 wherein said power system is an emergency power system in service to any electrical load at its output, [with or without an optional intermediate DC-to-AC 60 Hz line compatible inverter at said output, with] a source of primary power being connected at the input and [with] a storable power source being provided at said at least one secondary connection to insure operation during primary power interruptions.

114. (Amended) The universal power system of Claim 102 wherein said power system is an emergency power system in service to any electrical load at its output, [with or without an optional intermediate DC-to-AC 60 Hz line compatible inverter at said output, with] a source of primary power being connected at the input and [with] a storable power source being provided at said first secondary connection to insure operation during primary power interruptions.
